

Remarks

Applicants note with appreciation the Examiner's telephone conversation with the Applicants' representative on August 5, 2003, wherein the Applicants provisionally elected Group I, including Claims 1, 2, 5-7, 12 and 13. Applicants have canceled Claims 3-4 and 7-13. Applicants reserve the right to file one or more Divisional applications drawn to the canceled subject matter.

Applicants further note with appreciation the Examiner's helpful comments concerning the Information Disclosure Statement filed July 8, 2002. The Applicants submit a copy of European Patent 0 435 003.

Claim Rejections Under 35 U.S.C. 102

Claims 1, 2 and 5-7 have been rejected under 35 U.S.C. §102 (b) as being anticipated by Sato et al., Uematsu et al. or Kato et al. Applicants have amended Claim 1 to recite that the steel sheet contains 0.05-0.3% V and has a ridging height of less than 50 μ m and an r-value of at least 1.5. (Claim 7 has been cancelled as a result of the subject matter of Claim 7 being incorporated into Claim 1.) The Applicants respectfully submit that the references are no longer applicable.

The Applicants respectfully submit that Uematsu et al. disclose a material suitable for use in the exhaust manifold of an automobile, namely a pathway from an engine to a converter, which is exposed to high temperatures (Uematsu, Column 1, lines 13-19). More particularly, Uematsu et al. disclose a stainless steel having low temperature toughness and designed for the prevention of high temperature cracking, which is generated at the welded portions (Uematsu, Column 3, lines 1-6). Uematsu et al., however, do not disclose a steel sheet capable for use as a fuel tank and/or a fuel pipe.

The Applicants respectfully submit that the production methodology associated with Uematsu et al. is vastly different than the production methodology used to produce the Applicants' claimed

steel. The Applicants respectfully submit that a steel sheet with a ridge height of less than 50 μ m and an r-value of at least 1.5, would not necessarily result from the production process described in Uematsu et al.

The basic production methodology of Uematsu et al. is taught at Column 7 lines 6-25. Uematsu et al. describe a number of steps including hot rolling, cold rolling, and annealing. Nowhere, however, does Uematsu et al. describe a production process, employing a linear pressure(MN/m) during hot rolling or subjecting the sheet to cylindrical deep drawing. (See Applicants' Specification at page 16, para. 56 and 57 and Table 2). Applicants respectfully submit that these process conditions contribute to the attributes of the Applicants' claimed steel. It, therefore, naturally follows that the resulting product of Uematsu et al. would very likely necessarily have different characteristics from the Applicants' claimed steel. Thus, because of the different methodologies, the ridging height and/or r-value of Uematsu et al. steels are likely to be different, not necessarily the same.

To the extent that the rejection can be interpreted as taking the position that the claimed ridging height and/or r-value is inherent in Uematsu et al. because of any overlap in composition, the Applicants respectfully submit that it is the burden of the PTO to provide the rationale or evidence showing inherency. MPEP § 2112 states, in pertinent part:

The fact that a certain result or characteristic may occur or be present in the prior art is **not** sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993)(reversed rejection because inherency was based on what would result due to optimization of conditions, not what was **necessarily** present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981).

"In relying upon the theory of inherency, **the examiner must provide a basis in fact and/or technical reasoning** to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) ([underlining] in original) (bold emphasis added.)

In 1999, the Court of Appeals for the Federal Circuit wrote, in *In re Robertson*, 49 USPQ2d 1949, at 1950-51:

To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is **necessarily** present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991). "Inherency, however, may **not** be established by probabilities or possibilities. The mere fact that a certain thing **may** result from a given set of circumstances is **not** sufficient." *Id.* at 1269, 20 U.S.P.Q.2d at 1749 (quoting *In re Oelrich*, 666 F.2d 578, 581, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981). (Bold emphasis added.)

Applicants respectfully submit that the burden to show inherency of the claimed characteristics and properties is not present since there is no evidence on the record that the claimed properties necessarily flow from the teaching of the prior art. Nothing in the record or the prior art illustrates that the process in Uematsu would have necessarily lead to the Applicants' claimed steel having the claimed ridging height and/or r-value. In view of the foregoing, the Applicants respectfully request withdrawal of the rejection of Claims 1, 2 and 5-6 based on Uematsu et al.

Sato et al. discloses a stainless steel having excellent processability for manufacturing sheet materials and pipe materials for use in engine exhaust systems of automobiles, motorcycles and the like, wherein the steel is obtained by choosing a high lankford value (f-value, or r-value 1.7 or more).

Applicants' amended Claim 1 recites a composition suitable for making a ferritic stainless steel having superior processability and corrosion resistance for use in fuel tanks and fuel pipes. The corrosion resistance of the steel described in Sato et al. is only evaluated in a simulated environment of wet gas and a waste gas concentrated solution, which is adhered to in an environment within a

muffler. Further, Sato et al. makes no evaluation of corrosion resistance and processability in an environment of fuel gasoline. Applicants respectfully submit that the r-values of the Sato et al. steel 11 and 14, which added 0.50 and 0.31% V, were not evaluated. Applicants, however, claim V in the range of about 0.05 to about 0.3%. Furthermore, the Applicants have discovered that estimable corrosion resistance in an environment of gasoline and excellent processability are concurrently and surprisingly obtained by utilizing particular amounts of V and Mo. Given the Applicants' demonstration of the remarkable effect on corrosion resistance using a particular range of V (page 13, line 14 of Applicants' specification) and the effect of such range, in conjunction with Mo, on ridging height and r-value, it is respectfully submitted that the disclosure of Sato et al. fails to anticipate Claim 1.

Turning to the production methodology of Sato et al, the Applicants respectfully submit that steel sheets of Sato et al. would not result in steel having a ridging height of 50 μ m or less, wherein the steel is suitable for use as a fuel tank or fuel pipe. Specifically, Sato et al. do not disclose subjecting the steel sheet to a minimum linear pressure (MN/m) condition, or subjecting the steel sheet to cylindrical deep drawing. It, therefore, naturally follows that the resulting product would very likely necessarily have different characteristics from those of the claimed steel. The Applicants respectfully request withdrawal of the rejection of Claims 1,2, and 5-6 based on Sato et al.


Applicants respectfully submit that Kato et al. disclose the evaluation of formability, anti-ridging property, and pitting corrosion resistance in an environment of neutral chloride salt, such as NaCl to provide a ferritic stainless steel plate having deep drawability and anti-ridging properties for use in house-wares and parts of automobiles. In particular, Kato et al. teach that V is added primarily to improve formability, and that the amount of V, as a compositional element, is defined in relation to the Nb content for improving formability (Kato et al., page 6, paragraph 49). Nowhere in the

Applicants' Specification is there an indication that the Nb and V content need to be in a defined ratio. It is further noted that the V content of steel No. 9 in Table 1 of Kato et al., as pointed out in the Office Action, discloses a V content of 0.039%. In sharp contrast, the Applicants' amended Claim 1 recites a range from about 0.05% to about 0.3%, which is supported in the description on page 13, line 14. In this particular range, it has been found that a new composition comprising steel with corrosion resistance properties is obtained.

Moreover, the Applicants respectfully submit that the steel sheet produced by the methodology described in Kato et al. would not necessarily have the claimed characteristics of Applicants' claimed steel. The process described in Kato would not necessarily have led to a steel with remarkable corrosion resistance, having a ridge height of 50 μ m or less and/or having an r-value of at least 1.5. Kato et al. do not teach subjecting the steel sheet to a minimum linear pressure (MN/m) condition or subjecting the sheet to cylindrical deep drawing. As a result, the Applicants respectfully submit that the steel produced by Kato et al. would not inherently/necessarily exhibit the same properties of the Applicants' claimed steel. The Applicants respectfully request withdrawal of the rejection of Claims 1,2, and 5-6 based on Kato et al.

In view of the foregoing, Applicants respectfully submit the Application is now in a condition of allowance, which is respectfully requested.

Respectfully submitted,


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